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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,391	03/16/2004	Woonhee Hwang	944-003.207	3686

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EXAMINER
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VU, MICHAEL T

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/802,391

Applicant(s)

HWANG ET AL.

Examiner

Michael Vu

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER; FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-49 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7-8, 24-45, and 12-15 are rejected under 35 U.S.C. 101 because of these claims are direct to a data structure per se and this is "functional descriptive material".

Hence, **Non-statutory Subject Matter**.

Regarding **claims 7 and 12**, such claim 7, a data structure configured.... And claim 12, a data structure comprising .... And further without any computer readable medium to realize the potential functionality or intended use of the program.

Correspondingly, claims 8, 24-45 and 12-15 are also rejection because of depending on claims 7 and 12, respectively, containing the same deficiency.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-11, 16-23, 47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2004/0192308) in view of Nishimura (US 2004/0229649).

Regarding **claim 1**, Lee teaches a method of configuring a radio uplink, comprising: sending information having a cell specific parameter (Fig. 1, Mobile stations/User Equipment #112, 114, 116, 118 to Base Station/Node B #110); a radio link specific parameter (Fig. 1) [0006-0008]), or both in **one or more** messages on an interface between a network element and a radio network controller for configuring the radio uplink (Figs. 4-10, [0057-0072]), configuring the radio uplink at the network element [0020-0026],

**But Lee does not clearly teach on** sending a payload packet from the user equipment to the network element over the radio uplink after the uplink is configured at the network element and sending the payload packet to the radio network controller.

However, Nishimura teaches sending a data/payload from mobile device via base station to the radio network controller over the radio uplink [0065, 0085], and Figure #1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee, such that sending a payload packet from the user equipment to the network element over the radio uplink after the uplink is configured at the network element and sending the payload packet to the radio network controller, to optimize the performance of handover without causing loss of data.

Regarding **claim 2**, Lee/Nishimura teach the method of claim 1, further comprising: acknowledging correct reception of the payload packet at the network element on a radio downlink from the network element to the user equipment, and sending the payload packet from the network element to the radio network controller following said correct reception from the user equipment (Figures #2, and #5, [0017-0019]) of Lee.

Regarding **claims 3**, Lee/Nishimura teach the method of claim 1, further comprising sending the information on an interface between the radio network controller and another radio network controller for relay to another network element for configuring an uplink between the other network element and the user equipment (Figs. #4-10, [0052-0072]) of Lee.

Regarding **claim 16**, Lee/Nishimura teach the method of claim 1 wherein prior to said step of sending said information element on said interface between said network element and said radio network controller, said radio network controller decides a value for said cell specific parameter or said radio link specific parameter, or both, for said sending said information element with said cell specific parameter and said radio link specific parameter in said one or more messages on said interface from said radio network controller to said network element (Figs. #4-10, [0052-0072]) of Lee.

Regarding **claim 17**, Lee/Nishimura teach the method of claim 1, wherein said step of sending by said radio network controller includes sending at least one parameter to said network element indicative of boundaries within which choices may be made by said network element (Figs. 4-10, [0052-0072]) of Lee.

Regarding **claim 18**, the combination of Lee/Nishimura teach the method of claim 1, wherein said radio network controller is responsive to signaling from said network element with a proposed value or values for said cell specific parameter, said radio link specific parameter, or both, and said radio network controller carries out said step of sending said information element either confirming or changing said proposed value or values (Figs. 4-10, [0052-0072]) of Lee.

Regarding **claim 46**, Lee/Nishimura teach the method of claim 1, wherein the information has both a cell specific parameter and a radio link specific parameter in the messages respectively Regarding **claim 46**, Kim teaches the method of claim 1, wherein the information has both a cell specific parameter and a radio link specific parameter in the messages respectively (Figs. 1-2, [0002-0009]).

Regarding **claims 4, 9-11, and 48**, Lee teaches the A mobile telecommunications system (Fig. #3), comprising: a network element (Fig. #1) and a radio network controller (Fig. #4, RNC #305) connected by a signaling interface arrange to configure a radio uplink from a user equipment to the network element (Figs. #1-10), the interface being configured to convey messages having information elements containing parameters wherein information having a cell specific parameter (Figs. #1-10, [0005-0072]), a radio link specific parameter [0005-0072], or both is conveyable in one or more messages on the interface between the network element and the radio network controller for said configuring the radio uplink at the network element (Figs. 1-10, [0005-0072]),

**But Lee does not clearly teach on** wherein a payload packet is sent from the user equipment to the network element over the radio uplink after the uplink is configured at the user equipment for sending the payload packet to the radio network controller.

However, Nishimura teaches sending a data/payload from mobile device via base station to the radio network controller over the radio uplink [0065, 0085], and Figure #1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee, such that wherein a payload packet is sent from the user equipment to the network element over the radio uplink after the uplink is configured at the user equipment for sending the payload packet to the radio network controller, to optimize the performance of handover without causing loss of data.

Regarding **claim 5**, Lee/Nishimura teach the system of claim 4, further characterized in that reception of the payload packet is acknowledged by the network element on a radio downlink from the network element to the user equipment, and that the payload packet is sent from the network element to the radio network controller following reception from the user equipment (Figs. 1-3, [0007-0055]) of Nishimura.

Regarding **claim 6**, the combination of Lee/Nishimura teach the system of claim 5, further characterized in that the information element is sent on an interface between the radio network controller and another radio network controller for relay to another network element (Figs. 1-3, [0007-0055]) of Nishimura.

Regarding **claim 19**, Lee/Nishimura teach the mobile telecommunications system of claim 4, wherein said configuring the uplink between the other network element and the user equipment comprises configuring the uplink between the other network element and the user equipment followed by sending the payload packet from the user equipment to the other network element over the radio uplink between the user equipment and the other network element for sending the payload packet to the radio network controller (Figs. 1-10, [0005-0072]) of Lee.

Regarding **claim 20**, the combination of Lee/Nishimura teach the mobile telecommunications system of claim 19, further characterized in that correct reception of the payload packet at the network element is acknowledged on a radio downlink from the network element to the user equipment, and correct reception of the payload packet at the other network element is acknowledged on a radio downlink from the other network element to the user equipment (Figs. 1-3, [0007-0055]) of Nishimura.

Regarding **claim 21**, Lee/Nishimura teach the mobile telecommunications system of claim 4, wherein the radio network controller decides a value for said cell specific parameter or said radio link specific parameter, or both, prior to said information element being conveyed on said interface between the network element and the radio network controller (Figs. 1-3, [0007-0055]) of Nishimura.

Regarding **claim 22**, Lee/Nishimura teach the mobile telecommunications system of claim 4, characterized in that said radio network controller is arranged to send at least one parameter to the network element indicative of boundaries within which



choices may be made by said network element for said configuring said radio uplink (Figs. 1-10, [0005-0072]) of Lee.

Regarding **claim 23**, the combination of Lee/Nishimura teach the mobile telecommunications system of claim 4, characterized in that said radio network controller is responsive to signaling from said network element within proposed value or values for said cell specific parameter, said radio link parameter, or both, and said radio network controller conveys said one or more messages either confirming or changing said proposed value or values (Figs.1-10, [0005-0072]) of Lee.

Regarding **claim 47**, Lee/Nishimura teach the network element of claim 10, further comprising: wherein the network element is further arranged to acknowledge correct reception of the payload packet at the network element, on a radio downlink from the network element to the user equipment, and wherein the network element is further arranged to send the payload packet from the network element to the radio network controller following said correct reception from the user equipment (Figs. 1-3, [0007-0055]) of Nishimura.

Regarding **claim 49**, Lee/Nishimura teach the network element of claim 48, further comprising: means for acknowledging correct reception of the payload packet at the network element, on a radio downlink from the network element to the user equipment, and means for sending the payload packet from the network element to the radio network controller following said correct reception from the user equipment (Figs. 1-3, [0007-0055]) of Nishimura.

**Conclusion**


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael Vu  
Examiner



JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER